WHAT IS CLAIMED IS:

1. A system for prolonging the useful lifetime of an optical element upon which a laser beam is directed, the system comprising:

a holder adapted for mounting an optical element; and

a motor for rotating the holder upon which the optical element may be mounted such that when the laser beam impinges on the optical element, a point of impingement of the laser beam on the optical element is varied when the point of impingement of the laser beam on the optical element is radially separated from an axis of rotation of the optical element.

2. The system of claim 1, wherein the motor is adapted for rotating continuously the holder upon which the optical element may be mounted.

3. The system of claim 1, further comprising an optical element mounted to a rotable optical element holder.

4. The system of claim 3, wherein the optical element is glued onto the holder.

5. The system of claim 3, wherein the holder has an outer edge upon which the optical element abuts and a depression in its center filled with adhesive.

6. The system of claim 3, wherein the optical element projects radially outwardly over the holder.

7. The system of claim 1, wherein the motor is a stepper motor.

8. The system of claim 1, wherein the laser beam impinges on the optical element at an inclination angle.

9. The system of claim 8, wherein the inclination angle is approximately 45°.

10. The system of claim 3, wherein the optical element reflects a portion of the impinging laser beam and transmits a portion of the impinging beam.

11. The system of claim 10, further comprising a beam dump, and wherein a transmitted beam, transmitted through the optical element, is directed into the beam dump.

12. The system of claim 11, wherein the beam dump is provided on a rear side of the optical element.

13. The system of claim 12, wherein the beam dump is mechanically separate from the optical element.

14. The system of claim 3, wherein the optical element is a mirror.

15. The system of claim 14, wherein the mirror has a dichroic coating, which reflects impinging ultraviolet radiation and transmits impinging visible and infrared radiation.

16. The system of claim 3, wherein the optical element projects radially outwardly over the holder, and wherein the optical element is a mirror.

17. The system of claim 3, wherein the laser beam impinges on the optical element at an inclination angle, and wherein the optical element is a mirror.

18. The system of claim 17, wherein the inclination angle is approximately 45°.

19. The system of claim 3, wherein the optical element reflects and also transmits the impinging laser beam, and wherein the optical element is a mirror.

20. The system of claim 3, wherein the axis of rotation is the central axis of the optical element, wherein the motor is adapted for rotating continuously the holder upon which the optical element may be mounted, wherein the optical element is glued onto the holder, wherein the holder has an outer edge upon which the optical element abuts and a

depression in its center filled with adhesive, wherein the optical element projects radially outwardly over the holder, wherein the laser beam impinges on the optical element at an inclination angle of approximately 45°, wherein the optical element reflects and also transmits the impinging laser beam, wherein the transmitted beam is directed into a beam dump provided on a rear side of the optical element, or into a stationary beam trap, wherein the optical element is a mirror and wherein the mirror has a dichroic coating, which reflects impinging ultraviolet radiation and transmits impinging visible radiation and infrared radiation.

21. A method of prolonging the useful lifetime of an optical element, the method comprising:
shining a laser beam on an optical element; and
rotating the optical element, such that a point of impingement of the laser beam on a the optical element is varied when the point of impingement of the laser beam on the optical element is radially separated from an axis of rotation of the optical element.

22. The method of claim 21, wherein the optical element is rotated continuously.

23. The method of claim 21, wherein the optical element is rotated by a stepper motor.

24. The method of claim 21, wherein the laser beam impinges on the optical element at an inclination angle.

25. The method of claim 24 wherein the inclination angle is approximately 45°.

26. The method of claim 21, wherein the optical element reflects a portion of the impinging laser beam and transmits a portion of the impinging beam.

27. The method of claim 26, wherein a transmitted beam, transmitted through the optical element, is directed into a beam dump.

28. The method of claim 21, wherein the optical element is a mirror, and wherein the mirror has a dichroic coating, which reflects impinging ultraviolet radiation and transmits impinging visible and infrared radiation.